

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

OFFICE OF AIR MANAGEMENT

**J. M. Huber Corporation - Huber Engineered Materials
165 Steel Drive
Portage, Indiana 46368**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F 127-11241-00038	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-8-3(b)]

The Permittee owns and operates a stationary non-metallic minerals processing plant.

Authorized Individual: Rick Zwingelberg
Source Address: 165 Steel Drive, Portage, Indiana 46368
Mailing Address: 165 Steel Drive, Portage, Indiana 46368
Phone Number: 217 - 224 - 8737
SIC Code: 1422
County Location: Porter
County Status: Nonattainment for ozone
Attainment for all other criteria pollutants
Source Status: Federally Enforceable State Operating Permit (FESOP)
Minor Source, under Emission Offset Rules;
Minor Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

Mill 1

- (a) One (1) enclosed mill system, known Mill 1, equipped with a baghouse for particulate matter control, exhausted through Stack 01-MDC-001, installed in April 1992, capacity 12.5 tons of non-metallic minerals per hour.
- (b) One (1) storage silo bin, known as 01-FPT-001, equipped with a baghouse for particulate matter control, exhausted through Stack 01-BNV-001, installed April 1992, storage capacity: 800 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.
- (c) One (1) dust-free loadout, known as 01-DFL-001, equipped with a baghouse for particulate matter control, exhausted through Stack 01-BNV-002, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (d) One (1) outside rock hopper, known as 01-ORH-001, exhausted through Stack 01-ORH-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (e) One (1) belt conveyor, known as 01-RBF-001, exhausted through Stack 01-RBF-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (f) Two (2) mill feed tanks, known as 01-MFT-001 and 01-MFT-002, exhausted through Stacks 01-MFT-001 and 01-MFT-002, installed April 1992, storage capacity: 300 tons of non-metallic minerals each, throughput capacity: 12.5 tons of non-metallic minerals per hour each.

- (g) One (1) bucket elevator, known as 01-BEL-001, exhausted through Stack 01-BEL-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (h) One (1) belt conveyor, known as 01-RBC-001, exhausted through Stack 01-RBC-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.

Mill 2

- (i) One (1) enclosed mill system, known as Mill 2, equipped with a baghouse for particulate matter control, exhausted through Stack 02-MDC-001, installed in April 1992, capacity 12.5 tons of non-metallic minerals per hour.
- (j) One (1) storage silo bin, known as 02-FPT-001, equipped with a baghouse for particulate matter control, exhausted through Stack 02-BNV-001, installed April 1992, storage capacity: 800 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.

Mill 3

- (k) One (1) enclosed mill system, known as Mill 3, equipped with a baghouse for particulate matter control, exhausted through Stack 03-MDC-001, installed in April 1992, capacity 12.5 tons of non-metallic minerals per hour.
- (l) One (1) storage silo bin, known as 03-FPT-001, equipped with a baghouse for particulate matter control, exhausted through Stack 03-BNV-001, installed April 1992, storage capacity: 800 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.
- (m) One (1) dust-free loadout, known as 03-DFL-001, equipped with a baghouse for particulate matter control, exhausted through Stack 03-BNV-002, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (n) One (1) inside rock hopper, known as 03-IRH-001, exhausted through Stack 03-IRH-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (o) One (1) belt conveyor, known as 03-RBF-001, exhausted through Stack 03-RBF-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (p) One (1) product lump breaker, known as 03-PLB-001, exhausted through Stack 03-PLB-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (q) One (1) bucket elevator, known as 03-BEL-001, exhausted through Stack 03-BEL-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (r) One (1) inside feed tank, known as 03-MFT-001, exhausted through Stack 03-MFT-001, installed April 1992, storage capacity: 60 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.
- (s) One (1) belt conveyor, known as 03-RBC-001, exhausted through Stack 03-RBC-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.

Note: There is no Mill 4.

Mill 5

- (t) One (1) enclosed mill system, known as Mill 5, equipped with a baghouse for particulate matter control, exhausted through Stack 05-MDC-001, installed in March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (u) Two (2) storage silo bins, known as 05-FPT-001 and 05-FPT-002, each equipped with a baghouse for particulate matter control, exhausted through Stacks 05-BNV-001 and 05-BNV-002, installed March 1997, storage capacity: 800 tons of non-metallic minerals each, throughput capacity: 25 tons of non-metallic minerals per hour each.
- (v) One (1) dust-free loadout, known as 05-DFL-001, equipped with a baghouse for particulate matter control, exhausted through Stack 05-BNV-003, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (w) One (1) outside rock hopper, known as 05-ORH-001, exhausted through Stack 05-ORH-001, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (x) One (1) belt conveyor, known as 05-RBF-001, exhausted through Stack 05-RBF-001, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (y) One (1) bucket elevator, known as 05-BEL-001, exhausted through Stack 05-BEL-001, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (z) One (1) inside feed tank, known as 05-MFT-001, exhausted through Stack 05-MFT-001, installed March 1997, storage capacity: 150 tons of non-metallic minerals, throughput capacity: 25 tons of non-metallic minerals per hour.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.
- (b) Combustion source flame safety purging on startup.
- (c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (d) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
 - (2) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (e) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

- (g) Paved and unpaved roads and parking lots with public access.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) for a Federally Enforceable State Operating Permit (FESOP).

A.5 Prior Permit Conditions

- (a) This permit shall be used as the primary document for determining compliance with applicable requirements established by previously issued permits.
- (b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, including any term or condition from a previously issued construction or operation permit, IDEM, OAM, when applicable shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued.

GENERAL CONDITIONS

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2, and 326 IAC 2-7 shall prevail.

This permit is issued for a fixed term of five (5) years from the effective date, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3.

(a) All terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM.

- (b) Unless otherwise stated, terms and conditions of this permit, including any provisions to limit the source's potential to emit, are enforceable by the United States Environmental Protection Agency (U.S. EPA) and citizens under the Clean Air Act.

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

This permit does not convey any property rights of any sort, or any exclusive privilege.

(a) The Permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall furnish to IDEM, OAM, within a reasonable time, any information that IDEM, OAM, may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit.
- (c) Upon request, the Permittee shall also furnish to IDEM, OAM, copies of records required to be kept by this permit. If the Permittee wishes to assert a claim of confidentiality over any

of the furnished records, the Permittee must furnish such records to IDEM, OAM, along with a claim of confidentiality under 326 IAC 17. If requested by IDEM, OAM, or the U.S. EPA, to furnish copies of requested records directly to U. S. EPA, and if the Permittee is making a claim of confidentiality regarding the furnished records, the Permittee must furnish such confidential records directly to the U.S. EPA along with a claim of confidentiality under 40 CFR 2, Subpart B.

B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAM may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.10 Compliance with Permit Conditions [326 IAC 2-8-4(5)(A)] [326 IAC 2-8-4(5)(B)]

(a) The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit, except those specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act and is grounds for:

- (1) Enforcement action;
- (2) Permit termination, revocation and reissuance, or modification; and
- (3) Denial of a permit renewal application.

(b) It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

B.11 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted under this permit shall contain certification by a authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, on the attached Certification Form, with each submittal.

(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The certification shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than April 15 of each year to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on

the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

- (c) The annual compliance certification report shall include the following:
- (1) The identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was based on continuous or intermittent data;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and
 - (5) Such other facts as specified in Sections D of this permit, IDEM, OAM, may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. IDEM, OAM may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

B.14 Emergency Provisions [326 IAC 2-8-12]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAM, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone No.: 1-800-451-6027 (ask for Office of Air Management, Compliance Section) or,
Telephone No.: 317-233-5674 (ask for Compliance Section)
Facsimile No.: 317-233-5967

Failure to notify IDEM, OAM, by telephone or facsimile within four (4) daytime business hours after the beginning of the emergency, or after the emergency is discovered or reasonably should have been discovered, shall constitute a violation of 326 IAC 2-8 and any other applicable rules. [326 IAC 2-8-12(f)]

- (5) For each emergency lasting one (1) hour or more, the Permittee submitted notice either in writing or facsimile, of the emergency to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions) for sources subject to this rule after the effective date of this rule. This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) IDEM, OAM, may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAM, by telephone or facsimile of an emergency lasting more than one (1) hour in compliance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

within ten (10) calendar days from the date of the discovery of the deviation.

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit or a rule. It does not include:

- (1) An excursion from compliance monitoring parameters as identified in Section D of this permit unless tied to an applicable rule or limit; or
- (2) An emergency as defined in 326 IAC 2-7-1(12); or
- (3) Failure to implement elements of the Preventive Maintenance Plan unless such failure has caused or contributed to a deviation.
- (4) Failure to make or record information required by the compliance monitoring provisions of Section D unless such failure exceeds 5% of the required data in any calendar quarter.

A Permittee's failure to take the appropriate response step when an excursion of a compliance monitoring parameter has occurred is a deviation.

- (c) Written notification shall be submitted on the attached Emergency/Deviation Occurrence Reporting Form or its substantial equivalent. The notification does not need to be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (d) Proper notice submittal under 326 IAC 2-7-16 satisfies the requirement of this subsection.

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination
[326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)]
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAM, determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]
- (c) Proceedings by IDEM, OAM, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAM, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAM, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.17 Permit Renewal [326 IAC 2-8-3(h)]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAM, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except

those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, IN 46206-6015

(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]

(1) A timely renewal application is one that is:

- (A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
- (B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

(2) If IDEM, OAM, upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.

(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]

If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAM, takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAM, any additional information identified as needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-8-10] [326 IAC 2-8-11.1]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.

(b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1) only if a certification is required by the terms of the applicable rule.

(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.19 Operational Flexibility [326 IAC 2-8-15]

- (a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:
- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any approval required by 326 IAC 2-1.1 has been obtained;
 - (3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and
 - (5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.

Such records shall consist of all information required to be submitted to IDEM, OAM, in the notices specified in 326 IAC 2-8-15(b), (c)(1), and (d).
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-8-15(a) and the following additional conditions:
- (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1.

- (c) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (d) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAM or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.20 Construction Permit Requirement [326 IAC 2]

A modification, construction, or reconstruction shall be approved if required by and in accordance with the applicable provisions of 326 IAC 2.

B.21 Inspection and Entry [326 IAC 2-8-5(a)(2)]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAM, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- (c) Inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) Sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) Utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements. [326 IAC 2-8-5(a)(4)]

B.22 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The application which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-11(b)(3)]

B.23 Annual Fee Payment [326 IAC 2-8-4(6)][326 IAC 2-8-16]

- (a) The Permittee shall pay annual fees to IDEM, OAM, within thirty (30) calendar days of receipt of a billing. If the Permittee does not receive a bill from IDEM, OAM the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action, or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-0425 (ask for OAM, Technical Support and Modeling Section), to determine the appropriate permit fee.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emissions Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
- (2) The potential to emit any regulated pollutant, including PM₁₀, from the entire source, except particulate matter (PM) and volatile organic compounds (VOCs), shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period;
- (3) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (4) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)), emissions of particulate matter (PM) from the entire source shall be limited to less than two-hundred and fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.2 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity

monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3(a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2. The provisions of 326 IAC 9-1-2 are not federally enforceable.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plans submitted on August 30, 1990 and December 13, 1996:

- (a) Pursuant to CP 127-1915-00038, issued on April 15, 1991, the fugitive dust plan requires that stockpiled limestone dust be controlled by water on an as-needed basis. An enclosed dust control system shall be used to control fugitive dust from the mills (1, 2 and 3) and processing equipment. All finished product shall be loaded into bulk trucks using dust free loading spouts. Each dust collector shall have a sensor to alert the operator if too much dust should pass by it. Outdoor conveying equipment shall be covered. All roads shall be paved. Over the road product shall be hauled by tanker truck.
- (b) Pursuant to CP 127-5063-00038, issued on February 28, 1997, the fugitive particulate matter emissions shall be controlled by wet suppression of haul and traffic areas on an as-needed basis.

C.7 Operation of Equipment [326 IAC 2-8-5(a)(4)]

Except as otherwise provided in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.8 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.9 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61.140]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement that the inspector be accredited is federally enforceable.

Testing Requirements [326 IAC 2-8-4(3)]

C.10 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM, within forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAM, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

Compliance with applicable requirements shall be documented as required by this permit. All monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

in writing, prior to the end of the initial ninety (90) day compliance schedule with full justification of the reasons for inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.12 Maintenance of Monitoring Equipment [326 IAC 2-8-4(3)(A)(iii)]

- (a) In the event that a breakdown of the monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less than one (1) hour until such time as the continuous monitor is back in operation.
- (b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.13 Monitoring Methods [326 IAC 3]

Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, or other approved methods as specified in this permit.

C.14 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ($\pm 2\%$) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]

If a regulated substance, subject to 40 CFR 68, is present at a source in more than a threshold quantity, 40 CFR 68 is an applicable requirement and the Permittee shall:

(a) Submit:

- (1) A compliance schedule for meeting the requirements of 40 CFR 68 by the date provided in 40 CFR 68.10(a); or
- (2) As a part of the compliance certification submitted under 326 IAC 2-7-6(5), a certification statement that the source is in compliance with all the requirements of 40 CFR 68, including the registration and submission of a Risk Management Plan (RMP); and
- (3) A verification to IDEM, OAM, that a RMP or a revised plan was prepared and submitted as required by 40 CFR 68.

(b) Provide annual certification to IDEM, OAM, that the Risk Management Plan is being properly implemented.

All documents submitted pursuant to this condition shall include the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.16 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-8-4][326 IAC 2-8-5] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

- (1) This condition;
- (2) The Compliance Determination Requirements in Section D of this permit;
- (3) The Compliance Monitoring Requirements in Section D of this permit;
- (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

- (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
 - (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement

activities to resolve noncompliant stack tests.

- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.18 Monitoring Data Availability

- (a) With the exception of performance tests conducted in accordance with Section C- Performance Testing all observations, sampling, maintenance procedures, and record keeping, required as a condition of this permit shall be performed at all times the equipment is operating at normal representative conditions.
- (b) As an alternative to the observations, sampling, maintenance procedures, and record keeping of subsection (a) above, when the equipment listed in Section D of this permit is not operating, the Permittee shall either record the fact that the equipment is shut down or perform the observations, sampling, maintenance procedures, and record keeping that would otherwise be required by this permit.
- (c) If the equipment is operating but abnormal conditions prevail, additional observations and sampling should be taken with a record made of the nature of the abnormality.
- (d) If for reasons beyond its control, the operator fails to make required observations, sampling, maintenance procedures, or record keeping, reasons for this must be recorded.
- (e) At its discretion, IDEM may excuse such failure providing adequate justification is documented and such failures do not exceed five percent (5%) of the operating time in any quarter.
- (f) Temporary, unscheduled unavailability of staff qualified to perform the required observations, sampling, maintenance procedures, or record keeping shall be considered a valid reason for failure to perform the requirements in (a) above.

C.19 General Record Keeping Requirements [326 IAC 2-8-4(3)][326 IAC 2-8-5]

- (a) Records of all required monitoring data and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAM, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Records of required monitoring information shall include, where applicable:
 - (1) The date, place, and time of sampling or measurements;

- (2) The dates analyses were performed;
 - (3) The company or entity performing the analyses;
 - (4) The analytic techniques or methods used;
 - (5) The results of such analyses; and
 - (6) The operating conditions existing at the time of sampling or measurement.
- (c) Support information shall include, where applicable:
- (1) Copies of all reports required by this permit;
 - (2) All original strip chart recordings for continuous monitoring instrumentation;
 - (3) All calibration and maintenance records;
 - (4) Records of preventive maintenance shall be sufficient to demonstrate that failure to implement the Preventive Maintenance Plan did not cause or contribute to a violation of any limitation on emissions or potential to emit. To be relied upon subsequent to any such violation, these records may include, but are not limited to: work orders, parts inventories, and operator's standard operating procedures. Records of response steps taken shall indicate whether the response steps were performed in accordance with the Compliance Response Plan required by Section C - Compliance Monitoring Plan - Failure to take Response Steps, of this permit, and whether a deviation from a permit condition was reported. All records shall briefly describe what maintenance and response steps were taken and indicate who performed the tasks.
- (d) All record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.20 General Reporting Requirements [326 IAC 2-8-4(3)(C)]

- (a) To affirm that the source has met all the compliance monitoring requirements stated in this permit the source shall submit a Semi-annual Compliance Monitoring Report. Any deviation from the requirements and the date(s) of each deviation must be reported. The Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Management
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

- (d) Unless otherwise specified in this permit, any semi-annual report shall be submitted within thirty (30) days of the end of the reporting period. The report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) All instances of deviations as described in Section B- Deviations from Permit Requirements Conditions must be clearly identified in such reports. The Emergency/Deviation Occurrence Report does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (f) Any corrective actions or response steps taken as a result of each deviation must be clearly identified in such reports.
- (g) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period.

Stratospheric Ozone Protection

C.21 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

- (a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156
- (b) Equipment used during the maintenance, service, repair or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

Mill 1

- (a) One (1) enclosed mill system, known Mill 1, equipped with a baghouse for particulate matter control, exhausted through Stack 01-MDC-001, installed in April 1992, capacity 12.5 tons of non-metallic minerals per hour.
- (b) One (1) storage silo bin, known as 01-FPT-001, equipped with a baghouse for particulate matter control, exhausted through Stack 01-BNV-001, installed April 1992, storage capacity: 800 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.
- (c) One (1) dust-free loadout, known as 01-DFL-001, equipped with a baghouse for particulate matter control, exhausted through Stack 01-BNV-002, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (d) One (1) outside rock hopper, known as 01-ORH-001, exhausted through Stack 01-ORH-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (e) One (1) belt conveyor, known as 01-RBF-001, exhausted through Stack 01-RBF-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (f) Two (2) mill feed tanks, known as 01-MFT-001 and 01-MFT-002, exhausted through Stacks 01-MFT-001 and 01-MFT-002, installed April 1992, storage capacity: 300 tons of non-metallic minerals each, throughput capacity: 12.5 tons of non-metallic minerals per hour each.
- (g) One (1) bucket elevator, known as 01-BEL-001, exhausted through Stack 01-BEL-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (h) One (1) belt conveyor, known as 01-RBC-001, exhausted through Stack 01-RBC-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.

Mill 2

- (i) One (1) enclosed mill system, known as Mill 2, equipped with a baghouse for particulate matter control, exhausted through Stack 02-MDC-001, installed in April 1992, capacity 12.5 tons of non-metallic minerals per hour.
- (j) One (1) storage silo bin, known as 02-FPT-001, equipped with a baghouse for particulate matter control, exhausted through Stack 02-BNV-001, installed April 1992, storage capacity: 800 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.

Mill 3

- (k) One (1) enclosed mill system, known as Mill 3, equipped with a baghouse for particulate matter control, exhausted through Stack 03-MDC-001, installed in April 1992, capacity 12.5 tons of non-metallic minerals per hour.
- (l) One (1) storage silo bin, known as 03-FPT-001, equipped with a baghouse for particulate matter control, exhausted through Stack 03-BNV-001, installed April 1992, storage capacity: 800 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.
- (m) One (1) dust-free loadout, known as 03-DFL-001, equipped with a baghouse for particulate matter control, exhausted through Stack 03-BNV-002, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (n) One (1) inside rock hopper, known as 03-IRH-001, exhausted through Stack 03-IRH-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Facility Description [326 IAC 2-8-4(10)]: continued

Mill 3

- (o) One (1) belt conveyor, known as 03-RBF-001, exhausted through Stack 03-RBF-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (p) One (1) product lump breaker, known as 03-PLB-001, exhausted through Stack 03-PLB-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (q) One (1) bucket elevator, known as 03-BEL-001, exhausted through Stack 03-BEL-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (r) One (1) inside feed tank, known as 03-MFT-001, exhausted through Stack 03-MFT-001, installed April 1992, storage capacity: 60 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.
- (s) One (1) belt conveyor, known as 03-RBC-001, exhausted through Stack 03-RBC-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.

Note: There is no Mill 4.

Mill 5

- (t) One (1) enclosed mill system, known as Mill 5, equipped with a baghouse for particulate matter control, exhausted through Stack 05-MDC-001, installed in March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (u) Two (2) storage silo bins, known as 05-FPT-001 and 05-FPT-002, each equipped with a baghouse for particulate matter control, exhausted through Stacks 05-BNV-001 and 05-BNV-002, installed March 1997, storage capacity: 800 tons of non-metallic minerals each, throughput capacity: 25 tons of non-metallic minerals per hour each.
- (v) One (1) dust-free loadout, known as 05-DFL-001, equipped with a baghouse for particulate matter control, exhausted through Stack 05-BNV-003, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (w) One (1) outside rock hopper, known as 05-ORH-001, exhausted through Stack 05-ORH-001, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (x) One (1) belt conveyor, known as 05-RBF-001, exhausted through Stack 05-RBF-001, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (y) One (1) bucket elevator, known as 05-BEL-001, exhausted through Stack 05-BEL-001, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (z) One (1) inside feed tank, known as 05-MFT-001, exhausted through Stack 05-MFT-001, installed March 1997, storage capacity: 150 tons of non-metallic minerals, throughput capacity: 25 tons of non-metallic minerals per hour.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-5(1)]

D.1.1 NSPS Subpart OOO and 326 IAC 12

This source, consisting of Mills 1, 2, 3 and 5, is subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.670 through 60.676, Subpart OOO. This rule requires that:

- (a) Particulate matter (PM) emissions to the atmosphere from any capture system shall be limited to 0.05 grams per dry standard cubic meter or seven percent (7%) opacity.

- (b) If any transfer point on a conveyor belt or any other affected facility is enclosed by a building, it must comply with the emission limits in paragraphs (a), (b), and (c) of Section 60.672. Otherwise, the building enclosing the affected facility must comply with section (e)(1) and (2) which essentially states that no visible fugitive emissions are acceptable, except from a vent. Vent emissions are limited to 0.05 grams per dry standard cubic meter (g/dscm) or seven percent (7%) opacity. Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from these requirements.

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2(c)]

- (a) Pursuant to CP 127-5063-00038, issued on February 28, 1997, the allowable particulate matter from the Mill 5 baghouse operations (Mill 5, 05-FPT-001, 05-FPT-002 and 05-DFL-001) shall not exceed 35.4 pounds per hour each when operating at a process weight rate of 25.0 tons per hour each.
- (b) The allowable particulate matter (PM) emission rate from the Mill 1, 2, and 3 baghouse operations for Mill 1 (Mill 1, 01-FPT-001 and 01-DFL-001), for Mill 2 (Mill 2 and 02-FPT-001) and for Mill 3 (Mill 3, 03-FPT-001 and 03-DFL-001) shall not exceed 22.3 pounds per hour each when operating at a process weight rate of 12.5 tons per hour each.
- (c) The allowable PM emission rate is calculated with the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.1.3 PM₁₀ [326 IAC 2-8-4]

- (a) Pursuant to 326 IAC 2-8-4, the combined PM₁₀ emissions from the facilities in Section D.1 shall not exceed a total of 96.0 tons per year.
- (b) Pursuant to 326 IAC 2-8-4, the individual emissions units equipped with baghouses at Mills 1, 2, 3 and 5 shall not exceed the following hourly PM₁₀ emission limits:

Facility	Hourly PM ₁₀ Emission Limit (pounds per hour)
Mill 1	1.87
01-FPT-001	1.04
01-DFL-001	0.624
Mill 2	1.87
02-FPT-001	1.04
Mill 3	1.87
03-FPT-001	1.04
03-DFL-001	0.624
Mill 5	7.05
05-FPT-001	1.79
05-FPT-002	1.79
05-DFL-001	0.624

- (c) Compliance with these PM_{10} emission limits will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the following facilities and any control devices:

- (a) At the Mill 1 Facilities: Mill 1, 01-FPT-001 and 01-DFL-001
- (b) At the Mill 2 Facilities: Mill 2 and 02-FPT-001
- (c) At the Mill 3 Facilities: Mill 3, 03-FPT-001 and 03-DFL-001
- (d) At the Mill 5 Facilities: Mill 5, 05-FPT-001, 05-FPT-002 and 05-DFL-001

Compliance Determination Requirements [326 IAC 2-8-5(a)(1) & (4)] [326 IAC 2-1.1-11]

D.1.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

- (a) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM or opacity testing of all facilities in Section D.1 utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner to demonstrate compliance with the NSPS Subpart OOO requirements of Condition D.1.1. These PM or opacity performance tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration for Mill 1, Mill 2, Mill 3 and Mill 5 as well as any additional facilities that did not show compliance during the test performed during the period between 30 and 36 months after issuance of this permit. In addition to these requirements, IDEM may require compliance testing when necessary to determine if these facilities are in compliance.
- (b) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM_{10} testing on all facilities controlled by baghouses in Mills 1, 2, 3 and 5 (Mill 1, 01-FPT-001, 01-DFL-001, Mill 2, 02-FPT-001, Mill 3, 03-FPT-001, 03-DFL-001, Mill 5, 05-FPT-001, 05-FPT-002 and 05-DFL-001) utilizing Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM_{10} , or other methods as approved by the Commissioner to demonstrate compliance with Condition D.1.3. These PM_{10} performance tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration for Mill 1, Mill 2, Mill 3 and Mill 5 as well as any additional facilities that did not show compliance during the test performed during the period between 30 and 36 months after issuance of this permit. PM_{10} includes filterable and condensable PM_{10} . In addition to these requirements, IDEM may require compliance testing when necessary to determine if these facilities are in compliance.

Compliance Monitoring Requirements [326 IAC 2-8-6(1)] [326 IAC 2-8-5(1)]

D.1.6 Particulate Matter (PM)

Pursuant to CP 127-5063-00038, issued on February 28, 1997 and CP 127-1915-00038, issued on April 15, 1991, the baghouses for PM control shall be in operation at all times when the Mills 1, 2, 3, and 5 are in operation.

D.1.7 Visible Emissions Notations

- (a) Visible emission notations of the baghouse stack exhausts for Mill 1 (01-MDC-001, 01-BNV-001 and 01-BNV-002), for Mill 2 (02-MDC-001 and 02-BNV-001), for Mill 3 (03-MDC-001, 03-BNV-001 and 03-BNV-002), and for Mill 5 (05-MDC-001, 05-BNV-001, 05-BNV-002 and

05-BNV-003) shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.

D.1.8 Parametric Monitoring

The Permittee shall record the total static pressure drop across the baghouses used in conjunction with Mill 1, 2, 3 and 5 operations, at least once daily when Mill 1, 2, 3 and 5 is in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 4.0 and 10.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

The instrument used for determining the pressure shall comply with Section C - Pressure Gauge Specifications, of this permit, shall be subject to approval by IDEM, OAM, and shall be calibrated at least once every six (6) months.

D.1.9 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the Mill 1, 2, 3 and 5 operation when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.1.10 Broken or Failed Bag Detection

In the event that bag failure has been observed:

- (a) The affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) hours of discovery of the failure and shall include a timetable for completion. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).
- (b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-8-5(3)] [326 IAC 2-8-19]

D.1.11 Record Keeping Requirements

- (a) To document compliance with Condition D.1.7, the Permittee shall maintain records of daily visible emission notations of the facility stack exhausts for Mill 1 (01-MDC-001, 01-BNV-001 and 01-BNV-002), for Mill 2 (02-MDC-001 and 02-BNV-001), for Mill 3 (03-MDC-001, 03-BNV-001 and 03-BNV-002), and for Mill 5 (05-MDC-001, 05-BNV-001, 05-BNV-002 and 05-BNV-003).
- (b) To document compliance with Condition D.1.8, the Permittee shall maintain the following:
 - (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
 - Inlet and outlet differential static pressure.
 - (2) Documentation of all response steps implemented, per event.
 - (3) Operation and preventive maintenance logs, including work purchases orders, shall be maintained.
 - (4) Quality Assurance/Quality Control (QA/QC) procedures.
 - (5) Operator standard operating procedures (SOP).
 - (6) Manufacturer's specifications or its equivalent.
 - (7) Equipment "troubleshooting" contingency plan.
 - (8) Documentation of the dates vents are redirected.
- (b) To document compliance with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.9 and the dates the vents are re-directed.
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]: - Insignificant Activity

- (e) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6. (326 IAC 8-3-5)

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

Emission Limitations and Standards [326 IAC 2-8-5(1)]

D.2.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.

- (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Determination Requirements [326 IAC 2-8-5(a)(1) & (4)] [326 IAC 2-1.1-11]

D.2.2 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing when necessary to determine if the facility is in compliance with Condition D.2.1.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: J. M. Huber Corporation - Huber Engineered Materials
Source Address: 165 Steel Drive, Portage, Indiana 46368
Mailing Address: 165 Steel Drive, Portage, Indiana 46368
FESOP No.: F 127-11241-00038

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) _____
- 9 Report (specify) _____
- 9 Notification (specify) _____
- 9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY/DEVIATION OCCURRENCE REPORT

Source Name: J. M. Huber Corporation - Huber Engineered Materials
Source Address: 165 Steel Drive, Portage, Indiana 46368
Mailing Address: 165 Steel Drive, Portage, Indiana 46368
FESOP No.: F 127-11241-00038

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2

- 9 1. This is an emergency as defined in 326 IAC 2-7-1(12)
The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and
The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
- 9 2. This is a deviation, reportable per 326 IAC 2-8-4(3)(C)
The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:

Control Equipment:

Permit Condition or Operation Limitation in Permit:

Description of the Emergency/Deviation:

Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
SEMI-ANNUAL COMPLIANCE MONITORING REPORT**

Source Name: J. M. Huber Corporation - Huber Engineered Materials
Source Address: 165 Steel Drive, Portage, Indiana 46368
Mailing Address: 165 Steel Drive, Portage, Indiana 46368
FESOP No.: F 127-11241-00038

Months: _____ **to** _____ **Year:** _____

This report is an affirmation that the source has met all the compliance monitoring requirements stated in this permit. This report shall be submitted semi-annually. Any deviation from the compliance monitoring requirements and the date(s) of each deviation must be reported. Additional pages may be attached if necessary. This form can be supplemented by attaching the Emergency/Deviation Occurrence Report. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD.

Compliance Monitoring Requirement (eg. Permit Condition D.1.3)	Number of Deviations	Date of each Deviation

Form Completed By: _____

Title/Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Subpart 000-Standards of Performance for Nonmetallic Mineral Processing Plants

Source: 51 FR 31337, Aug. 1, 1985, unless otherwise noted.

§ 60.670 Applicability and designation of affected facility.

(a) Except as provided in paragraphs (b), (c) and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station.

(b) An affected facility that is subject to the provisions of subpart F or I or that follows in the plant process any facility subject to the provisions of subparts F or I of this part is not subject to the provisions of this subpart.

(c) Facilities at the following plants are not subject to the provisions of this subpart:

(1) Fixed sand and gravel plants and crushed stone plants with capacities, as defined in § 60.671, of 23 megagrams per hour (25 tons per hour) or less;

(2) Portable sand and gravel plants and crushed stone plants with capacities, as defined in § 60.671, of 136 megagrams per hour (150 tons per hour) or less; and

(3) Common clay plants and pumice plants with capacities, as defined in § 60.671, of 9 megagrams per hour (10 tons per hour) or less.

(d)(1) When an existing facility is replaced by a piece of equipment of equal or smaller size, as defined in § 60.671, having the same function as the existing facility, the new facility is exempt from the provisions of §§ 60.672, 60.674, and 60.675 except as provided for in paragraph (d)(3) of this section.

(2) An owner or operator seeking to comply with this paragraph shall comply with the reporting requirements of § 60.676 (a) and (b).

(3) An owner or operator replacing all existing facilities in a production line with new facilities does not qualify for the exemption described in paragraph (d)(1) of this section and must comply with the provisions of §§ 60.672, 60.674 and 60.675.

(e) An affected facility under paragraph (a) of this section that commences construction, reconstruction, or modification after August 31, 1983 is subject to the requirements of this part.

§ 60.671 Definitions.

All terms used in this subpart, but not specifically defined in this section, shall have the meaning given them in the Act and in subpart A of this part.

Bagging operation means the mechanical process by which bags are filled with nonmetallic minerals.

Belt conveyor means a conveying device that transports material from one location to another by means of an endless belt that is carried on a series of idlers and routed around a pulley at each end.

Bucket elevator means a conveying device of nonmetallic minerals consisting of a head and foot assembly which supports and drives an endless single or double strand chain or belt to which buckets are attached.

Building means any frame structure with a roof.

Capacity means the cumulative rated capacity of all initial crushers that are part of the plant.

Capture system means the equipment (including enclosures, hoods, ducts, fans, dampers, etc.) used to capture and transport particulate matter generated by one or more process operations to a control device.

Control device means the air pollution control equipment used to reduce particulate matter emissions released to the atmosphere from one or more process operations at a nonmetallic mineral processing plant.

Conveying system means a device for transporting materials from one piece of equipment or location to another location within a plant. Conveying systems include but are not limited to the following: Feeders, belt conveyors, bucket elevators and pneumatic systems.

Crusher means a machine used to crush any nonmetallic minerals, and includes, but is not limited to, the following types: jaw, gyratory, cone, roll, rod mill, hammermill, and impactor.

Enclosed truck or railcar loading station means that portion of a nonmetallic mineral processing plant where nonmetallic minerals are loaded by an enclosed conveying system into enclosed trucks or railcars.

Fixed plant means any nonmetallic mineral processing plant at which the processing equipment specified in § 60.670(a) is attached by a cable, chain, turnbuckle, bolt or other means (except electrical connections) to any anchor, slab, or structure including bedrock.

Fugitive emission means particulate matter that is not collected by a capture system and is released to the atmosphere at the point of generation.

Grinding mill means a machine used for the wet or dry fine crushing of any nonmetallic mineral. Grinding mills include, but are not limited to, the following types: hammer, roller, rod, pebble and ball, and fluid energy. The grinding mill includes the air conveying system, air separator, or air classifier, where such systems are used.

Initial crusher means any crusher into which nonmetallic minerals can be fed without prior crushing in the plant.

Nonmetallic mineral means any of the following minerals or any mixture of which the majority is any of the following minerals:

- (a) Crushed and Broken Stone, including Limestone, Dolomite, Granite, Traprock, Sandstone, Quartz, Quartzite, Marl, Marble, Slate, Shale, Oil Shale, and Shell.
- (b) Sand and Gravel.
- (c) Clay including Kaolin, Fireclay, Bentonite, Fuller's Earth, Ball Clay, and Common Clay.
- (d) Rock Salt.
- (e) Gypsum.
- (f) Sodium Compounds, including Sodium Carbonate, Sodium Chloride, and Sodium Sulfate.
- (g) Pumice.
- (h) Gilsonite.
- (i) Talc and Pyrophyllite.
- (j) Boron, including Borax, Kernite, and Colemanite.
- (k) Barite.
- (l) Fluor spar.
- (m) Feldspar.
- (n) Diatomite.
- (o) Perlite.
- (p) Vermiculite.
- (q) Mica.
- (r) Kyanite, including Andalusite, Sillimanite, Topaz, and Dumortierite.

Nonmetallic mineral processing plant means any combination of equipment that is used to crush or grind any nonmetallic mineral wherever located, including lime plants, power plants, steel mills, asphalt concrete plants, portland cement plants, or any other facility processing nonmetallic minerals except as provided in § 60.670 (b) and (c).

Portable plant means any nonmetallic mineral processing plant that is mounted on any chassis or skids and may be moved by the application of a lifting or pulling force. In addition, there shall be no cable, chain, turnbuckle, bolt or other means (except electrical connections) by which any piece of equipment is attached or clamped to any anchor, slab, or structure, including bedrock that must be removed prior to the application of a lifting or pulling force for the purpose of transporting the unit.

Production line means all affected facilities (crushers, grinding mills, screening operations, bucket elevators, belt conveyors, bagging operations, storage bins, and enclosed truck and railcar loading stations) which are directly connected or are connected together by a conveying system.

Screening operation means a device for separating material according to size by passing undersize material through one or more mesh surfaces (screens) in series, and retaining oversize material on the mesh surfaces (screens).

Size means the rated capacity in tons per hour of a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station; the total surface area of the top screen of a screening operation; the width of a conveyor belt; and the rated capacity in tons of a storage bin.

Stack emission means the particulate matter that is released to the atmosphere from a capture system.

Storage bin means a facility for storage (including surge

bins) or nonmetallic minerals prior to further processing or loading.

Transfer point means a point in a conveying operation where the nonmetallic mineral is transferred to or from a belt conveyor except where the nonmetallic mineral is being transferred to a stockpile.

Truck dumping means the unloading of nonmetallic minerals from movable vehicles designed to transport nonmetallic minerals from one location to another. Movable vehicles include but are not limited to: trucks, front end loaders, skip hoists, and railcars.

Vent means an opening through which there is mechanically induced air flow for the purpose of exhausting from a building air carrying particulate matter emissions from one or more affected facilities.

§ 60.672 Standard for particulate matter.

(a) On and after the date on which the performance test required to be conducted by § 60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any stack emissions which:

- (1) Contain particulate matter in excess of 0.05 g/dscm; or
- (2) Exhibit greater than 7 percent opacity, unless the stack emissions are discharged from an affected facility using a wet scrubbing control device. Facilities using a wet scrubber must comply with the reporting provisions of § 60.676 (c), (d), and (e).

(b) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any transfer point on belt conveyors or from any other affected facility any fugitive emissions which exhibit greater than 10 percent opacity, except as provided in paragraphs (c), (d) and (e) of this section.

(c) On and after the sixtieth day after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup, no owner or operator shall cause to be discharged into the atmosphere from any crusher, at which a capture system is not used, fugitive emissions which exhibit greater than 15 percent opacity.

(d) Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from the requirements of this section.

(e) If any transfer point on a conveyor belt or any other affected facility is enclosed in a building, then each enclosed affected facility must comply with the emission limits in paragraphs (a), (b) and (c) of this section, or the building enclosing the affected facility or facilities must comply with the following emission limits:

(1) No owner or operator shall cause to be discharged into the atmosphere from any building enclosing any transfer point on a conveyor belt or any other affected facility any visible fugitive emissions except emissions from a vent as defined in § 60.671.

(2) No owner or operator shall cause to be discharged into the atmosphere from any vent of any building enclosing any transfer point on a conveyor belt or any other affected facility emissions which exceed the stack emissions limits in paragraph (a) of this section.

§ 60.673 Reconstruction.

(a) The cost of replacement of ore-contact surfaces on processing equipment shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital cost that would be required to construct a comparable new facility" under § 60.15. Ore-contact surfaces are crushing surfaces; screen meshes, bars, and plates; conveyor belts; and elevator buckets.

(b) Under § 60.15, the "fixed capital cost of the new components" includes the fixed capital cost of all depreciable components (except components specified in paragraph (a) of this section) which are or will be replaced pursuant to all continuous programs of component replacement commenced within any 2-year period following August 31, 1983.

§ 60.674 Monitoring of operations.

The owner or operator of any affected facility subject to the provisions of this subpart which uses a wet scrubber to control emissions shall install, calibrate, maintain and operate the following monitoring devices:

(a) A device for the continuous measurement of the pressure loss of the gas stream through the scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 250 pascals ± 1 inch water gauge pressure and must be calibrated on an annual basis in accordance with manufacturer's instructions.

(b) A device for the continuous measurement of the scrubbing liquid flow rate to the wet scrubber. The monitoring device must be certified by the manufacturer to be accurate within ± 5 percent of design scrubbing liquid flow rate and must be calibrated on an annual basis in accordance with manufacturer's instructions.

§ 60.675 Test methods and procedures.

(a) In conducting the performance tests required in § 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in § 60.8(b). Acceptable alternative methods and procedures

are given in paragraph (e) of this section.

(b) The owner or operator shall determine compliance with the particulate matter standards in § 60.272(a) as follows:

(1) Method 5 or Method 17 shall be used to determine the particulate matter concentration. The sample volume shall be at least 1.70 dscm (60 dscf). For Method 5, if the gas stream being sampled is at ambient temperature, the sampling probe and filter may be operated without heaters. If the gas stream is above ambient temperature, the sampling probe and filter may be operated at a temperature high enough, but no higher than 121 EC (250 EF), to prevent water condensation on the filter.

(2) Method 9 and the procedures in § 60.11 shall be used to determine opacity.

(c) In determining compliance with the particulate matter standards in § 60.672 (b) and (c), the owner or operator shall use Method 9 and the procedures in § 60.11, with the following additions:

(1) The minimum distance between the observer and the emission source shall be 4.57 meters (15 feet).

(2) The observer shall, when possible, select a position that minimizes interference from other fugitive emission sources (e.g., road dust). The required observer position relative to the sun (Method 9, Section 2.1) must be followed.

(3) For affected facilities using wet dust suppression for particulate matter control, a visible mist is sometimes generated by the spray. The water mist must not be confused with particulate matter emissions and is not to be considered a visible emission. When a water mist of this nature is present, the observation of emissions is to be made at a point in the plume where the mist is no longer visible.

(d) In determining compliance with § 60.672(e), the owner or operator shall use Method 22 to determine fugitive emissions. The performance test shall be conducted while all affected facilities inside the building are operating. The performance test for each building shall be at least 75 minutes in duration, with each side of the building and the roof being observed for at least 15 minutes.

(e) The owner or operator may use the following as alternatives to the reference methods and procedures specified in this section:

(1) For the method and procedure of paragraph (c) of this section, if emissions from two or more facilities continuously interfere so that the opacity of fugitive emissions from an individual affected facility cannot be read, either of the following procedures may be used:

(i) Use for the combined emission stream the highest fugitive opacity standard applicable to any of the individual affected facilities contributing to the emissions stream.

(ii) Separate the emissions so that the opacity of emissions from each affected facility can be read.

(f) To comply with § 60.676(d), the owner or operator shall record the measurements as required § 60.676(c) using the monitoring devices in § 60.674 (a) and (b) during each particulate matter run and shall determine the averages.

§ 60.676 Reporting and recordkeeping.

(a) Each owner or operator seeking to comply with § 60.670(d) shall submit to the Administrator the following information about the existing facility being replaced and the replacement piece of equipment.

(1) For a crusher, grinding mill, bucket elevator, bagging operation, or enclosed truck or railcar loading station:

(i) The rated capacity in tons per hour of the existing facility being replaced and

(ii) The rated capacity in tons per hour of the replacement equipment.

(2) For a screening operation:

(i) The total surface area of the top screen of the existing screening operation being replaced and

(ii) The total surface area of the top screen of the replacement screening operation.

(3) For a conveyor belt:

(i) The width of the existing belt being replaced and

(ii) The width of the replacement conveyor belt.

(4) For a storage bin:

(i) The rated capacity in tons of the existing storage bin being replaced and

(ii) The rated capacity in tons of replacement storage bins.

(b) Each owner or operator seeking to comply with § 60.670(d) shall submit the following data to the Director of the Emission Standards and Engineering Division, (MD-13), U.S. Environmental Protection Agency, Research Triangle Park, North Carolina 27711.

(1) The information described in § 60.676(a).

(2) A description of the control device used to reduce particulate matter emissions from the existing facility and a list of all other pieces of equipment controlled by the same control device; and

(3) The estimated age of the existing facility.

(c) During the initial performance test of a wet scrubber, and daily thereafter, the owner or operator shall record the measurements of both the change in pressure of the gas stream across the scrubber and the scrubbing liquid flow rate.

(d) After the initial performance test of a wet scrubber, the owner or operator shall submit semiannual reports to the Administrator of occurrences when the measurements of the scrubber pressure loss (or gain) and liquid flow rate differ by more than ± 30 percent from the averaged determined during the most recent performance test.

(e) The reports required under paragraph (d) shall be postmarked within 30 days following end of the second and fourth calendar quarters.

(f) The owner or operator of any affected facility shall submit written reports of the results of all performance tests conducted

to demonstrate compliance with the standards set forth in § 60.672, including reports of opacity observations made using Method 9 to demonstrate compliance with § 60.672 (b) and (c) and reports of observations using Method 22 to demonstrate compliance with § 60.672(e).

(g) The requirements of this paragraph remain in force until and unless the Agency, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such States. In that event, affected sources within the State will be relieved of the obligation to comply with paragraphs (a), (c), (d), (e), and (f) of this section, provided that they comply with requirements established by the State. Compliance with paragraph (b) of this section will still be required.

(Approved by the Office of Management and Budget under control number 2060-0050)

[51 FR 31337, Aug. 1, 1985, as amended at 54 FR 6680, Feb. 14, 1989]

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for Federally Enforceable State Operating Permit (FESOP)

Source Name:	J. M. Huber Corporation - Huber Engineered Materials
Source Location:	165 Steel Drive, Portage, Indiana 46368
County:	Porter
FESOP:	F 127-11241-00038
SIC Code:	1422
Permit Reviewer:	Mark L. Kramer

On January 20, 2000, the Office of Air Management (OAM) had a notice published in the Chesterton Tribune, Chesterton, Indiana, stating that J. M. Huber Corporation - Huber Engineered Materials had applied for a Federally Enforceable State Operating Permit (FESOP) to operate a non-metallic minerals processing plant with baghouses for particulate matter control. The notice also stated that OAM proposed to issue a FESOP for this operation and provided information on how the public could review the proposed FESOP and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this FESOP should be issued as proposed.

On February 23, 2000, Brian Cooley of Huber Engineered Materials, made comments on the proposed FESOP. Those comments are as follows:

Comment 1:

Condition C.1 - Overall Source Limit, Paragraph (a) - Item 2 under Paragraph (a) should be clarified to state that regulated criteria pollutants, including particulate matter below 10 microns (PM₁₀), shall be limited to less than 100 tons per 12 consecutive month period.

Response 1:

Condition C.1(a)(2) has been revised as suggested to clarify that PM₁₀ is limited to less than one hundred (100) tons per twelve (12) consecutive months as follows:

C.1 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit volatile organic compounds (VOCs) from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period. This limitation shall also satisfy the requirements of 326 IAC 2-3 (Emission Offset);
- (2) The potential to emit any regulated pollutant, **including PM₁₀**, from the entire source, except particulate matter (PM) and volatile organic compounds (VOCs), shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period;

Comment 2:

Condition C.6 - Fugitive Particulate Matter Emissions, Paragraph (a) - The fugitive dust plan should only require watering of the limestone stockpile when visible emissions are observed. The limestone's natural high moisture content and the stockpile's exposure to precipitation typically prevent the generation of any fugitive emissions. Requiring additional wet suppression will only serve to increase the amount of fuel burned in the mill furnaces to dry the limestone during the grinding process. This will generate excess nitrogen oxide and other combustion emissions while only preventing negligible amounts of fugitive dust emissions.

Response 2:

Condition C.6(a) has been revised to only require the addition of water to the limestone stockpile as necessary to avoid fugitive dust. The condition has been revised as follows:

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the plans submitted on August 30, 1990 and December 13, 1996:

- (a) Pursuant to CP 127-1915-00038, issued on April 15, 1991, the fugitive dust plan requires that stockpiled limestone dust be controlled by water **on an as-needed basis**. An enclosed dust control system shall be used to control fugitive dust from the mills (1, 2 and 3) and processing equipment. All finished product shall be loaded into bulk trucks using dust free loading spouts. Each dust collector shall have a sensor to alert the operator if too much dust should pass by it. Outdoor conveying equipment shall be covered. All roads shall be paved. Over the road product shall be hauled by tanker truck.

Comment 3:

Condition D.1.1 - NSPS Subpart OOO and 326 IAC 12 - This condition should clarify which of the four production mills are covered by NSPS Subpart OOO. The past construction permits only listed Mill 5 as a Subpart OOO-affected process. J. M. Huber would like this permit to clearly define the NSPS status of Mills 1 through 3. In addition, Item B should clarify that the transfer of raw material into the outside rock hoppers is exempt from the opacity and particulate matter limits under 40 CFR 60.672.

Response 3:

Condition D.1.1 has been clarified to specify that the source (Mills 1, 2, 3 and 5) is subject to NSPS Subpart OOO. Condition D.1.1(b) has been clarified to show that truck dumping of raw materials is exempt pursuant to 40CFR 60.672(d). In addition, Condition D.1.1(b) has been revised as follows to include the numerical value that was inadvertently left out of the condition:

D.1.1 NSPS Subpart OOO and 326 IAC 12

This source, **consisting of Mills 1, 2, 3 and 5**, is subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.670 through 60.676, Subpart OOO. This rule requires that:

- (a) Particulate matter (PM) emissions to the atmosphere from any capture system shall be limited to 0.05 grams per dry standard cubic meter or seven percent (7%) opacity.
- (b) If any transfer point on a conveyor belt or any other affected facility is enclosed by a building, it must comply with the emission limits in paragraphs (a), (b), and (c) of Section 60.672. Otherwise, the building enclosing the affected facility must comply with section (e)(1) and (2) which essentially states that no visible fugitive emissions are acceptable, except from a vent. Vent emissions are limited to **0.05** grams per dry standard cubic meter (g/dscm) or seven percent (7%) opacity. **Truck dumping of nonmetallic minerals into any screening operation, feed hopper, or crusher is exempt from these requirements.**

Comment 4:

Condition D.1.2 - Particulate Matter (PM) - Huber is questioning whether it is appropriate to include a process weight rate limit for any of the mill baghouses that are subject to NSPS Subpart OOO. The allowable emission rates from Subpart OOO represent a small percentage of the process weight rate allowable emissions and, therefore, is clearly the more stringent of these two overlapping requirements. Per EPA's second Title V White Paper, overlapping applicable requirements can be streamlined by including only the most stringent requirement. This would reduce redundant record keeping or other administrative activities.

Response 4:

The allowable particulate matter emission rate pursuant to 326 IAC 6-3-2 has been specified numerically for compliance determination. In the case that the NSPS emission limits are ever exceeded during a performance test, compliance with the State rule can be accurately assessed, rather than assuming that it too, has been violated. Therefore, Condition D.1.2 has not been deleted.

Comment 5:

Condition D.1.3 - PM₁₀, Paragraph (b) - Huber believes that hourly emission limits are not required to assure compliance with an annual emissions cap. Monthly emission limits on each mill should be more than adequate to assure compliance with the annual facility emission cap. Therefore, the hourly PM₁₀ emission limits for Mills 1 through 5 listed under Paragraph (b) should be converted to the following monthly limits:

<u>Mill Number</u>	<u>Monthly PM₁₀ Emission Limit (tons/year)</u>
1	1.29
2	1.06
3	1.29
5	4.11

Response 5:

Condition D.1.3 has been revised to include PM₁₀ limits for each of the individual facilities within the four (4) mills. The original condition contained overall PM₁₀ emission limits for each mill. This condition was revised to make it possible to verify compliance with the emission limits through stack testing of the individual emission units. Verification of monthly emission limits in a compliance test is not feasible and would require continuous operation as well as simultaneous testing of the entire mill.

The Technical Support Document (TSD) provided the rationale for the apportionment of the overall FESOP PM₁₀ emission limitation to each of the four (4) mills.

As stated in the TSD, pursuant to 326 IAC 2-8, the amount of PM₁₀ shall be limited to less than one hundred (100) tons per year for the entire source including insignificant activities. PM₁₀ emissions from the Mill 1, 2, 3 and 5 operations shall not exceed a total of 96.0 tons per year. Furthermore, in order to comply with the 96 tons per year emission limit, the PM₁₀ emission limits for the baghouse controlled emissions were originally specified for Mills 1, 2, 3 and 5. The PM₁₀ contribution from storage, unloading/loading and the remaining uncontrolled emissions units at the four (4) Mills totaled 3.06 tons per year. Therefore, the controlled PM₁₀ emissions from Mills 1, 2, 3 and 5 were limited to 96 - 3.06 or 92.9 tons per year. In order to apportion the PM₁₀ emissions by Mill, the limit (92.9 tons per year) was divided by the controlled potential to emit for Mills 1, 2, 3 and 5 for the baghouses (19.2 tons per year) and multiplied by the controlled hourly emission rates by Mill with the stated control efficiency of the baghouses. The following table from the TSD has been revised to show the individual PM₁₀ emission limits by facility using the same methodology:

Mill # Facility	Controlled Hourly PM ₁₀ Emission Rate (pounds per hour)	Limit Hourly PM ₁₀ Emission Rate (pounds per hour)
4	0.729	3.53
2	0.600	2.90
3	0.729	3.53
5	2.33	11.3
Mill 1	0.386	1.87
01-FPT-001	0.214	1.04
01-DFL-001	0.129	0.624
Mill 2	0.386	1.87
02-FPT-001	0.214	1.04
Mill 3	0.386	1.87
03-FPT-001	0.214	1.04

Mill # Facility	Controlled Hourly PM ₁₀ Emission Rate (pounds per hour)	Limit Hourly PM ₁₀ Emission Rate (pounds per hour)
03-DFL-001	0.129	0.624
Mill 5	1.457	7.05
05-FPT-001	0.370	1.79
05-FPT-002	0.370	1.79
05-DFL-001	0.129	0.624
Total	4.38	21.2

The PM₁₀ hourly limits for the all facilities with baghouses sums to 21.2 pounds per hour equivalent to 92.9 tons per year. Therefore, Condition D.1.3 has been revised to show the facility PM₁₀ emission limits rather than the sum per mill to facilitate individual testing of each baghouse facility as follows:

D.1.3 PM₁₀ [326 IAC 2-8-4]

- (a) Pursuant to 326 IAC 2-8-4, the combined PM₁₀ emissions from the facilities in Section D.1 shall not exceed a total of 96.0 tons per year.
- (b) Pursuant to 326 IAC 2-8-4, the individual emissions units equipped with baghouses at Mills 1, 2, 3 and 5 shall not exceed the following hourly PM₁₀ emission limits:

Mill # Facility	Hourly PM ₁₀ Emission Limit (pounds per hour)
1	3.53
2	2.90
3	3.53
5	11.3
Mill 1	1.87
01-FPT-001	1.04
01-DFL-001	0.624
Mill 2	1.87
02-FPT-001	1.04
Mill 3	1.87
03-FPT-001	1.04

Mill # Facility	Hourly PM ₁₀ Emission Limit (pounds per hour)
03-DFL-001	0.624
Mill 5	7.05
05-FPT-001	1.79
05-FPT-002	1.79
05-DFL-001	0.624

- (c) Compliance with these PM₁₀ emission limits will satisfy 326 IAC 2-8-4. Therefore, the Part 70 rules (326 IAC 2-7) do not apply.
3. Condition D.1.5 has been revised to clarify what facilities require testing to show compliance with Conditions D.1.1 and D.1.3 as follows

D.1.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

- (a) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM or opacity testing **of all facilities in Section D.1 and PM₁₀ on all baghouses in Mills 1, 2, 3 and 5** utilizing Methods 5 or 17 (40 CFR 60, Appendix A) and ~~Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM₁₀~~, or other methods as approved by the Commissioner to demonstrate compliance with **the NSPS Subpart OOO requirements of Conditions D.1.1 and D.1.3**. These PM or opacity and PM₁₀ performance tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. ~~PM₁₀ includes filterable and condensable PM₁₀~~. In addition to these requirements, IDEM may require compliance testing when necessary to determine if these facilities are in compliance.
- (b) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM₁₀ testing on all facilities controlled by baghouses in Mills 1, 2, 3 and 5 (Mill 1, 01-FPT-001, 01-DFL-001, Mill 2, 02-FPT-001, Mill 3, 03-FPT-001, 03-DFL-001, Mill 5, 05-FPT-001, 05-FPT-002 and 05-DFL-001) utilizing Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM₁₀, or other methods as approved by the Commissioner to demonstrate compliance with Condition D.1.3. These PM₁₀ performance tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. PM₁₀ includes filterable and condensable PM₁₀. In addition to these requirements, IDEM may require compliance testing when necessary to determine if these facilities are in compliance.

Comment 6:

Condition D.1.4 - Preventive Maintenance Plan - This condition should be clarified to specify the preventive maintenance plan only applies to air pollution equipment controlling emissions from the listed production equipment. Paragraph (a), Item 1 of 326 IAC 1-6-3 indicates that inspections, maintenance, and repairs covered by a preventive maintenance plan are limited to the emission control devices.

Response 6:

Pursuant to 326 IAC 2-7-4(c)(9) (Permit Application), confirmation that the source maintains on-site a preventive maintenance plan as described in 326 IAC 1-6-3, must be included in the permit application. Pursuant to 326 IAC 2-7-5(13) (Permit Content), a provision that requires the source to do all of the following must be included in each Part 70 permit:

- (a) Maintain on-site the preventive maintenance plan as required under 326 IAC 2-7-4(c)(9);
- (b) Implement the preventive maintenance plan; and,
- (c) Forward to the department upon request the preventive maintenance plan.

The requirements in 326 IAC 1-6-1 and 326 IAC 1-6-3 specify that the requirement to maintain a Preventive Maintenance Plan is applicable to any facility that is required to obtain a permit under 326 IAC 2-1-2 (Registration) and 326 IAC 2-1-4 (Operating Permits). IDEM's compliance monitoring guidance states that a compliance monitoring plan is required only for:

- (a) the unit emits particulate matter, sulfur dioxide, or volatile organic compounds; and
- (b) the unit has existing applicable requirements; and
- (c) the unit is subject to a NSPS or NESHAP (for these units current requirements will satisfy as a compliance monitoring plan); or
- (d) the unit has a control device and the allowable emissions exceed ten (10) pounds per hour; or
- (e) the unit does not have a control device and has actual emissions exceeding twenty-five (25) tons per year.

Therefore, since a malfunction of the emission unit can cause excessive emissions prior to the air pollution control device, a PMP for both the emission unit and its control device is warranted. No change to the Condition D.1.4 is necessary.

Comment 7:

Condition D.1.5 - Testing Requirements - Huber should like to eliminate or minimize periodic stack testing that the draft permit requires on a 5-year schedule for all baghouses operated on Mills 1 through 5. Given that an initial compliance stack test is required along with daily monitoring of visible emissions and baghouse pressure drop, compliance assurance can be made without re-testing each baghouse every 5 years. At a minimum, Huber requests that the re-testing every five years be limited to the main mill baghouses which control the majority of emissions from the process.

Response 7:

The majority of each of the four (4) mills' potential to emit PM is attributable to facilities, Mill 1, Mill 2, Mill 3 and Mill 5 controlled by baghouses 01-MDC-001, 02-MDC-001, 03-MDC-001 and 05-MDC-001. Therefore, at this time, the required retesting of the source will only be specified for these

facilities and any additional facilities that do not pass the initial performance test once every five (5) years as follows:

D.1.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

- (a) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM or opacity testing of all facilities in Section D.1 utilizing Methods 5 or 17 (40 CFR 60, Appendix A), or other methods as approved by the Commissioner to demonstrate compliance with the NSPS Subpart OOO requirements of Condition D.1.1. These PM or opacity performance tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration **for Mill 1, Mill 2, Mill 3 and Mill 5 as well as any additional facilities that did not show compliance during the test performed during the period between 30 and 36 months after issuance of this permit.** In addition to these requirements, IDEM may require compliance testing when necessary to determine if these facilities are in compliance.
- (b) During the period between 30 and 36 months after issuance of this permit, the Permittee shall perform PM₁₀ testing on all facilities controlled by baghouses in Mills 1, 2, 3 and 5 (Mill 1, 01-FPT-001, 01-DFL-001, Mill 2, 02-FPT-001, Mill 3, 03-FPT-001, 03-DFL-001, Mill 5, 05-FPT-001, 05-FPT-002 and 05-DFL-001) utilizing Methods 201 or 201A and 202 (40 CFR 51, Appendix M) for PM₁₀, or other methods as approved by the Commissioner to demonstrate compliance with Condition D.1.3. These PM₁₀ performance tests shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration **for Mill 1, Mill 2, Mill 3 and Mill 5 as well as any additional facilities that did not show compliance during the test performed during the period between 30 and 36 months after issuance of this permit.** PM₁₀ includes filterable and condensable PM₁₀. In addition to these requirements, IDEM may require compliance testing when necessary to determine if these facilities are in compliance.

Comment 8:

Condition D.1.11 - Recordkeeping Requirements - Daily record keeping of the frequency and differential pressure of the baghouse cleaning cycle is required under Paragraph (b), Item 1(b). Huber operates pulsejet baghouses which are essentially continuously cleaning, and it is impossible to track each and every cleaning cycle. Therefore, this requirement should be eliminated.

Response 8:

IDEM agrees that since the pulsejet baghouses are almost continuously cleaning, it is unnecessary and impractical to record each and every cleaning cycle. Therefore, Condition D.1.11(b)(1)(B) has been deleted as follows:

- (b) To document compliance with Condition D.1.8, the Permittee shall maintain the following:
- (1) Daily records of the following operational parameters during normal operation when venting to the atmosphere:
- (A) Inlet and outlet differential static pressure; ~~and.~~
- (B) ~~Cleaning cycle: frequency and differential pressure.~~

**Indiana Department of Environmental Management
Office of Air Management**

**Technical Support Document (TSD)
for a Federally Enforceable Operating Permit (FESOP)**

Source Background and Description

Source Name:	J. M. Huber Corporation - Huber Engineered Materials
Source Location:	165 Steel Drive, Portage, Indiana 46368
County:	Porter
SIC Code:	1422
Operation Permit No.:	F 127-11241-00038
Permit Reviewer:	Mark L. Kramer

The Office of Air Management (OAM) has reviewed a FESOP application from J. M. Huber Corporation - Huber Engineered Materials relating to the operation of a non-metallic minerals processing plant.

Source Definition

In addition to the production facilities located at 165 Steel Drive, Portage, J. M. Huber Corporation currently stores raw materials in a rented building on the north side of Steel Drive. No processing activities are performed in this building. For future reference, this rented building will be considered part of this source.

Permitted Emission Units and Pollution Control Equipment

The source consists of the following permitted emission units and pollution control devices:

Mill 1

- (a) One (1) enclosed mill system, known Mill 1, equipped with a baghouse for particulate matter control, exhausted through Stack 01-MDC-001, installed in April 1992, capacity 12.5 tons of non-metallic minerals per hour.
- (b) One (1) storage silo bin, known as 01-FPT-001, equipped with a baghouse for particulate matter control, exhausted through Stack 01-BNV-001, installed April 1992, storage capacity: 800 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.
- (c) One (1) dust-free loadout, known as 01-DFL-001, equipped with a baghouse for particulate matter control, exhausted through Stack 01-BNV-002, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (d) One (1) outside rock hopper, known as 01-ORH-001, exhausted through Stack 01-ORH-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.

- (e) One (1) belt conveyor, known as 01-RBF-001, exhausted through Stack 01-RBF-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (f) Two (2) mill feed tanks, known as 01-MFT-001 and 01-MFT-002, exhausted through Stacks 01-MFT-001 and 01-MFT-002, installed April 1992, storage capacity: 300 tons of non-metallic minerals each, throughput capacity: 12.5 tons of non-metallic minerals per hour each.
- (g) One (1) bucket elevator, known as 01-BEL-001, exhausted through Stack 01-BEL-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (h) One (1) belt conveyor, known as 01-RBC-001, exhausted through Stack 01-RBC-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.

Mill 2

- (i) One (1) enclosed mill system, known as Mill 2, equipped with a baghouse for particulate matter control, exhausted through Stack 02-MDC-001, installed in April 1992, capacity 12.5 tons of non-metallic minerals per hour.
- (j) One (1) storage silo bin, known as 02-FPT-001, equipped with a baghouse for particulate matter control, exhausted through Stack 02-BNV-001, installed April 1992, storage capacity: 800 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.

Mill 3

- (k) One (1) enclosed mill system, known as Mill 3, equipped with a baghouse for particulate matter control, exhausted through Stack 03-MDC-001, installed in April 1992, capacity 12.5 tons of non-metallic minerals per hour.
- (l) One (1) storage silo bin, known as 03-FPT-001, equipped with a baghouse for particulate matter control, exhausted through Stack 03-BNV-001, installed April 1992, storage capacity: 800 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.
- (m) One (1) dust-free loadout, known as 03-DFL-001, equipped with a baghouse for particulate matter control, exhausted through Stack 03-BNV-002, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (n) One (1) inside rock hopper, known as 03-IRH-001, exhausted through Stack 03-IRH-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (o) One (1) belt conveyor, known as 03-RBF-001, exhausted through Stack 03-RBF-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (p) One (1) product lump breaker, known as 03-PLB-001, exhausted through Stack 03-PLB-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.
- (q) One (1) bucket elevator, known as 03-BEL-001, exhausted through Stack 03-BEL-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.

- (r) One (1) inside feed tank, known as 03-MFT-001, exhausted through Stack 03-MFT-001, installed April 1992, storage capacity: 60 tons of non-metallic minerals, throughput capacity: 12.5 tons of non-metallic minerals per hour.
- (s) One (1) belt conveyor, known as 03-RBC-001, exhausted through Stack 03-RBC-001, installed April 1992, capacity: 12.5 tons of non-metallic minerals per hour.

Note: There is no Mill 4.

Mill 5

- (t) One (1) enclosed mill system, known as Mill 5, equipped with a baghouse for particulate matter control, exhausted through Stack 05-MDC-001, installed in March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (u) Two (2) storage silo bins, known as 05-FPT-001 and 05-FPT-002, each equipped with a baghouse for particulate matter control, exhausted through Stacks 05-BNV-001 and 05-BNV-002, installed March 1997, storage capacity: 800 tons of non-metallic minerals each, throughput capacity: 25 tons of non-metallic minerals per hour each.
- (v) One (1) dust-free loadout, known as 05-DFL-001, equipped with a baghouse for particulate matter control, exhausted through Stack 05-BNV-003, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (w) One (1) outside rock hopper, known as 05-ORH-001, exhausted through Stack 05-ORH-001, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (x) One (1) belt conveyor, known as 05-RBF-001, exhausted through Stack 05-RBF-001, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (y) One (1) bucket elevator, known as 05-BEL-001, exhausted through Stack 05-BEL-001, installed March 1997, capacity: 25 tons of non-metallic minerals per hour.
- (z) One (1) inside feed tank, known as 05-MFT-001, exhausted through Stack 05-MFT-001, installed March 1997, storage capacity: 150 tons of non-metallic minerals, throughput capacity: 25 tons of non-metallic minerals per hour.

Unpermitted Emission Units and Pollution Control Equipment

There are no unpermitted facilities operating at this source during this review process.

New Emission Units and Pollution Control Equipment Receiving Prior Approval

There are no new facilities proposed at this source during this review process.

Insignificant Activities

The source also consists of the following insignificant activities, as defined in 326 IAC 2-7-1(21):

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.
- (b) Combustion source flame safety purging on startup.

- (c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month.
- (d) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
 - (2) Vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.
- (e) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6.
- (f) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (g) Paved and unpaved roads and parking lots with public access.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

CP 127-1915-00038, issued April 15, 1991
CP 127-3479-00038, issued February 18, 1994
CP 127-5063-00038, issued February 28, 1997

All conditions from previous approvals were incorporated into this FESOP. All conditions from CP 127-5063-00038, issued on February 28, 1997 superseded CP-127-3479, issued on February 18, 1994.

Enforcement Issue

There are no enforcement actions pending. The FESOP application was required to be submitted to IDEM by twelve (12) after the submission of the affidavit of construction. for CP 127-5063.

Recommendation

The staff recommends to the Commissioner that the FESOP be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An administratively complete FESOP application for the purposes of this review was received on August 13, 1999, originally transmitted in September 1998. Additional information was received on December 1 and 8, 1999.

Emission Calculations

See pages 1 through 6 of 6 of Appendix A of this document for detailed emissions calculations.

Potential To Emit

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA.”

Pollutant	Potential To Emit (tons/year)
PM	1,926
PM ₁₀	1,924
SO ₂	0.00
VOC	1.74
CO	0.00
NO _x	0.00

Note: For the purpose of determining Title V applicability for particulates, PM₁₀, not PM, is the regulated pollutant in consideration.

HAPs	Potential To Emit (tons/year)
TOTAL	None

- (a) The potential to emit (as defined in 326 IAC 2-1.1-1(16)) of PM₁₀ are equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are not counted toward determination of PSD and Emission Offset applicability.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the applicant's submittal on Form GSD-07 of the application.

Pollutant	Actual Emissions (tons/year)
PM	43.5
PM ₁₀	43.5
SO ₂	0.007

Pollutant	Actual Emissions (tons/year)
VOC	0.940
CO	0.3
NO _x	1.3
HAP	0.00

Limited Potential to Emit

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units.

	Limited Potential to Emit (tons/year)						
Process/facility	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	HAPs
Mills 1, 2, 3 & 5	24.6 (47.6)	22.3 (96.0)	0.00	0.00	0.00	0.00	0.00
Insignificant Activities	12.0	4.00	0.066	3.00	9.20	11.0	0.20
Total Emissions	36.6 (59.6)	26.3 (<100)	0.066	3.00	9.20	11.0	0.20

The PM values in parentheses are the sum of the allowable PM emissions pursuant to NSPS Subpart OOO that requires 0.05 grams per dry standard meter of exhaust for the emission units in the four (4) mills with baghouse controls and the potential PM emission rate for the uncontrolled processes at the four (4) mills, including the loading and unloading and the controlled storage PM emissions. The PM₁₀ values in parentheses reflect the balance of the allowable PM₁₀ emissions pursuant to 326 IAC 2-8.

County Attainment Status

The source is located in Porter County.

Pollutant	Status
PM ₁₀	Attainment
SO ₂	Attainment
NO ₂	Attainment
Ozone	Nonattainment
CO	Attainment
Lead	Attainment

Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to the ozone standards. Porter County has been designated as nonattainment for ozone.

Federal Rule Applicability

- (a) This source is subject to the New Source Performance Standard 326 IAC 12, 40 CFR 60.670 through 60.676, Subpart OOO. This rule requires that:
 - (1) Particulate matter (PM) emissions to the atmosphere from any capture system shall be limited to 0.05 grams per dry standard cubic meter or seven percent (7%) opacity.
 - (2) If any transfer point on a conveyor belt or any other affected facility is enclosed by a building, it must comply with the emission limits in paragraphs (a), (b), and (c) of Section 60.672. Otherwise, the building enclosing the affected facility must comply with section (e)(1) and (2) which essentially states that no visible fugitive emissions are acceptable, except from a vent. Vent emissions are limited to grams per dry standard cubic meter (g/dscm) or seven percent (7%) opacity.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) applicable to this source.

The degreasing operation, deemed an insignificant activity, is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs), Subpart T (40 CFR 63.460-469) since no halogenated HAP solvents are used.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is not subject to 326 IAC 2-6 (Emission Reporting), because its actual NO_x emissions are less than ten (10) tons per year in Porter County. The source is not one of the twenty-eight (28) listed sources and potential to emit PM₁₀ is limited to less than one-hundred (100) tons per year including fugitive emissions, therefore, 326 IAC 2-6 does not apply.

The source will be required to annually submit a statement of the actual emissions of all federally regulated pollutants from the source, for the purpose of fee assessment.

326 IAC 2-8-4 (FESOP)

Pursuant to this rule, the amount of PM₁₀ shall be limited to less than one hundred (100) tons per year for the entire source including insignificant activities. PM₁₀ emissions from the Mill 1, 2, 3 and 5 operations shall not exceed a total of 96.0 tons per year. Furthermore, in order to comply with the 96 tons per year emission limit, the PM₁₀ emissions from the baghouses shall not exceed the emission limits for Mills 1, 2, 3 and 5. Note the PM₁₀ contribution from storage, unloading/loading and the remaining uncontrolled emissions units at the four (4) Mills total 3.06 tons per year. Therefore, the controlled PM₁₀ emissions from Mills 1, 2, 3 and 5 will be limited to 96 - 3.06 or 92.9 tons per year. In order to apportion the PM₁₀ emissions by Mill, the limit (92.9 tons per year) was divided by the controlled potential to emit for Mills 1, 2, 3 and 5 for the baghouses (19.2 tons per year) and multiplied by the controlled hourly emission rates by Mill with the stated control efficiency of the baghouses. Therefore, the PM₁₀ emission limits are as follows:

Mill #	Controlled Hourly PM ₁₀ Emission Rate (pounds per hour)	Limit Hourly PM ₁₀ Emission Rate (pounds per hour)
1	0.729	3.53
2	0.600	2.90
3	0.729	3.53
5	2.33	11.3

Therefore, the Part 70 rules (326 IAC 2-7) do not apply.

326 IAC 5-1 (Opacity)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

- (a) Pursuant to CP 127-1915-00038, issued on April 15, 1991, fugitive dust shall be controlled according to the plan submitted on August 30, 1990. This plan requires that stockpiled limestone dust be controlled by water. An enclosed dust control system shall be used to control fugitive dust from the mills (1, 2 and 3) and processing equipment. All finished product shall be loaded into bulk trucks using dust free loading spouts. Each dust collector shall have a sensor to alert the operator if too much dust should pass by it. Outdoor conveying equipment shall be covered. All roads shall be paved. Over the road product shall be hauled by tanker truck.
- (b) Pursuant to CP 127-5063-00038, issued on February 28, 1997, fugitive particulate matter emissions shall be controlled according to the plan submitted on December 13, 1996. This plan consists of wet suppression of haul and traffic areas on an as-needed basis.

State Rule Applicability - Individual Facilities

326 IAC 2-8-4(9) (Preventive Maintenance Plan)

- (a) A Preventive Maintenance Plan is not required for the following emission units (Mill 1: 01-ORH-001, 01-RBF-001, 01-MFT-001, 01-MFT-002, 01-BEL-001 and 01-RBC-001, Mill 3: 03-IRH-001, 03-RBF-001, 03-PLB-001, 03-BEL-001, 03-MFT-001 and 03-RBC-001, Mill 5: 05-ORH-001, 05-RBF-001, 05-BEL-001 and 05-MFT-001) because each of these emission units does not have controls and the actual PM emissions are less than twenty five (25) tons per year, each.

- (b) A Preventive Maintenance Plan is required for each of the following emission units because each unit is subject to NSPS Subpart OOO: Mill 1 (Mill 1, 01-FPT-001 and 01-DFL-001), for Mill 2 (Mill 2 and 02-FPT-001), Mill 3 (Mill 3, 03-FPT-001 and 03-DFL-001), and for Mill 5 (Mill 5, 05-FPT-001, 05-FPT-002 and 05-DFL-001).

326 IAC 6-3-2 (Process Operations)

- (a) Mills 1, 2, and 3

The allowable particulate matter (PM) emission rate from the Mill 1, 2, and 3 baghouse operations shall not exceed 22.3 pounds per hour, each when operating at a process weight rate of 12.5 tons per hour each. The allowable PM emission rate is calculated with the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The baghouses shall be in operation at all times the Mills 1, 2, and/or 3 are in operation, in order to comply with these limits.

The PM emissions from each baghouse listed on page 1 of 5 of Appendix A substantiates that all eight (8) baghouses in Mills 1, 2 and 3 operations comply with the allowable PM emission rate of 22.3 pounds per hour.

- (b) Mill 5

Pursuant to CP 127-5063-00038, issued on February 28, 1997, the allowable particulate matter (PM) emission rate from the Mill 5 baghouse operations shall not exceed 35.4 pounds per hour, each when operating at a process weight rate of 25.0 tons per hour each. The allowable PM emission rate is calculated with the following:

Interpolation and extrapolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The baghouses shall be in operation at all times the Mill 5 is in operation, in order to comply with these limits.

The PM emissions from each baghouse listed on page 1 of 5 of Appendix A substantiates that all four (4) baghouses in Mill 5 operations comply with the allowable PM emission rate of 35.4 pounds per hour.

State Rule Applicability - Insignificant Activities

The degreasing operation that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 are subject to 326 IAC 8-3-5 which states:

326 IAC 8-3-5 (Organic Solvent Degreasing Operations)

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the owner or operator of cold cleaner degreaser facilities constructed after January 1, 1990 shall ensure that the following control equipment requirements are met:
 - (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
 - (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38EC) (one hundred degrees Fahrenheit (100EF)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9EC) (one hundred twenty degrees Fahrenheit (120EF)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
 - (1) Close the cover whenever articles are not being handled in the degreaser.

- (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAM, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

The facilities controlled by baghouses at Mills 1, 2, 3 and 5 have applicable compliance monitoring conditions as specified below:

- (a) Daily visible emissions notations of the baghouse stack exhausts for Mill 1 (01-MDC-001, 01-BNV-001 and 01-BNV-002), for Mill 2 (02-MDC-001 and 02-BNV-001), for Mill 3 (03-MDC-001, 03-BNV-001 and 03-BNV-002), and for Mill 5 (05-MDC-001, 05-BNV-001, 05-BNV-002 and 05-BNV-003) shall be performed during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed.
- (b) The Permittee shall record the total static pressure drop across all baghouses controlling the Mill 1, 2, 3 and 5 operations, at least daily when the Mill 1, 2, 3 and/or 5 is in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 4.0 to 10.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when the pressure reading is outside of the above mentioned range for any one reading.

These monitoring conditions are necessary because the baghouses for the processing operations must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations), NSPS Subpart OOO and 326 IAC 2-8 (FESOP).

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 188 hazardous air pollutants (HAPs) set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) FESOP Application Form GSD-08.

- (a) This source will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Clean Air Act Amendments.
- (b) See attached calculations for detailed air toxic calculations in Appendix A on pages 5 of 5.

Conclusion

The operation of this non-metallic minerals processing plant shall be subject to the conditions of the attached proposed FESOP No.: F 127-11241-00038.

**Appendix A: Emission Calculations
Baghouse Operations**

Company Name: J.M. Huber Corporation - Huber Engineered Materials
Address City IN Zip: 165 Steel Drive, Portage, IN 46368
FESOP: F 127-11241
Plt ID: 127-00038
Reviewer: Mark L. Kramer
Date: August 13, 1999

Particulate Matter

Mill #	Emission Unit	Baghouse Stack ID	Control Efficiency (%)	Grain Loading per Actual Cubic Foot of Outlet Air (grains/cubic ft.)	Gas or Air Flow Rate (acfm)	Emission Rate Before Controls (lbs/hr)	Emission Rate Before Controls (tons/yr)	Emission Rate After Controls (lbs/hr)	Emission Rate After Controls (tons/yr)
1	Mill 1	01-MDC-001	99.0%	0.010	4500	38.6	168.94	0.386	1.69
1	01-FPT-001	01-BNV-001	99.0%	0.010	2500	21.4	93.86	0.214	0.939
1	01-DFL-001	01-BNV-002	99.0%	0.010	1500	12.9	56.31	0.129	0.563
					Subtotal	72.9	319.11	0.729	3.191
2	Mill 2	02-MDC-001	99.0%	0.010	4500	38.6	168.94	0.386	1.689
2	02-FPT-001	02-BNV-001	99.0%	0.010	2500	21.4	93.86	0.214	0.939
					Subtotal	60.0	262.80	0.600	2.628
3	Mill 3	03-MDC-001	99.0%	0.010	4500	38.6	168.94	0.386	1.689
3	03-FPT-001	03-BNV-001	99.0%	0.010	2500	21.4	93.86	0.214	0.939
3	03-DFL-001	03-BNV-002	99.0%	0.010	1500	12.9	56.31	0.129	0.563
					Subtotal	72.9	319.11	0.729	3.191
5	Mill 5	05-MDC-001	99.0%	0.010	17000	145.7	638.23	1.457	6.382
5	05-FPT-001	05-BNV-001	99.0%	0.010	4320	37.0	162.19	0.370	1.622
5	05-FPT-002	05-BNV-002	99.0%	0.010	4320	37.0	162.19	0.370	1.622
5	05-DFL-001	05-BNV-003	99.0%	0.010	1500	12.9	56.31	0.129	0.563
					Subtotal	232.6	1018.91	2.326	10.189
TOTALS:						438.3	1919.9	4.4	19.2

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cubic ft.) (acfm) (60 min/hr) (lb/7000 grains)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)
Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)
Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Methodology

Allowable Emissions = 4.10(Process Weight Rate)^0.67

Allowable Rate of Emissions

Allowable pursuant to 326 IAC 6-3

Allowable Rate of Emissions

Emission Unit	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	Allowable Emissions (tons/yr)
Mill 1	12.50	22.3	97.5

Emission Unit	Process Weight Rate (tons/hr)	Allowable Emissions (lbs/hr)	Allowable Emissions (tons/yr)
Mill 5	25.00	35.43	155.2

01-FPT-001	12.50	22.3	97.5
01-DFL-001	12.50	22.3	97.5
Mill 2	12.50	22.3	97.5
02-FPT-001	12.50	22.3	97.5
Mill 3	12.50	22.3	97.5
03-FPT-001	12.50	22.3	97.5
03-DFL-001	12.50	22.3	97.5

05-FPT-001	25.00	35.43	155.2
05-FPT-002	25.00	35.43	155.2
05-DFL-001	25.00	35.43	155.2

Allowable Pursuant to NSPS Subpart OOO 0.05 g/dscm = 0.022gr/dscf

Particulate Matter

Mill #	Emission Unit	Baghouse Stack ID	Control Efficiency (%)	Grain Loading per Actual Cubic Foot of Outlet Air (grains/cubic ft.)	Gas or Air Flow Rate (acfm)	Emission Rate Before Controls (lbs/hr)	Emission Rate Before Controls (tons/yr)	Emission Rate After Controls (lbs/hr)	Emission Rate After Controls (tons/yr)
1	Mill 1	01-MDC-001	99.0%	0.022	4500	84.9	371.67	0.849	3.72
1	01-FPT-001	01-BNV-001	99.0%	0.022	2500	47.1	206.49	0.471	2.065
1	01-DFL-001	01-BNV-002	99.0%	0.022	1500	28.3	123.89	0.283	1.239
					Subtotal	160.3	702.05	1.603	7.021
2	Mill 2	02-MDC-001	99.0%	0.022	4500	84.9	371.67	0.849	3.717
2	02-FPT-001	02-BNV-001	99.0%	0.022	2500	47.1	206.49	0.471	2.065
					Subtotal	132.0	578.16	1.320	5.782
3	Mill 3	03-MDC-001	99.0%	0.022	4500	84.9	371.67	0.849	3.717
3	03-FPT-001	03-BNV-001	99.0%	0.022	2500	47.1	206.49	0.471	2.065
3	03-DFL-001	03-BNV-002	99.0%	0.022	1500	28.3	123.89	0.283	1.239
					Subtotal	160.3	702.05	1.603	7.021
5	Mill 5	05-MDC-001	99.0%	0.022	17000	320.6	1404.10	3.206	14.041
5	05-FPT-001	05-BNV-001	99.0%	0.022	4320	81.5	356.81	0.815	3.568
5	05-FPT-002	05-BNV-002	99.0%	0.022	4320	81.5	356.81	0.815	3.568
5	05-DFL-001	05-BNV-003	99.0%	0.022	1500	28.3	123.89	0.283	1.239
					Subtotal	511.8	2241.61	5.118	22.416

TOTALS:

		9.64	42.2
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Methodology

Emission Rate in lbs/hr (after controls) = (grains/cubic ft.) (acfm) (60 min/hr) (lb/7000 grains)

Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls): (lbs/hr)/(1-control efficiency)

Non-Baghouse Controlled PM/PM-10 Emissions

Mill #	Emission Unit	Equipment Description	Type of Emission Unit	Throughput (tons/hour)	PM Emission Factor (lbs/ton)	PM-10 Emission Factor (lbs/ton)	PM PTE (tons/yr)	PM-10 PTE (tons/yr)	
1	01-ORH-001	O. Rock Hopper	Loading	12.5	0.0021	0.0010	0.114975	0.05475	AP-42, Ch 11.19.2
1	01-RBF-001	Belt Conveyor	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
1	01-MFT-001	Mill Feed Tank	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
1	01-MFT-002	Mill Feed Tank	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
1	01-BEL-001	Bucket Elevator	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
1	01-RBC-001	Belt Conveyor	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
						Subtotal	0.9198	0.438	
3	03-IRH-001	I. Rock Hopper	Loading	12.5	0.0021	0.0010	0.114975	0.05475	AP-42, Ch 11.19.2
3	03-RBF-001	Belt Conveyor	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
3	03-PLB-001	Lump Breaker	Screening	12.5	0.0315	0.0150	1.724625	0.82125	AP-42, Ch 11.19.2

3	03-BEL-001	Bucket Elevator	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
3	03-MFT-001	I. Feed Tank	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
3	03-RBC-001	Belt Conveyor	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
Subtotal							2.48346	1.1826	
5	05-ORH-001	O. Rock Hopper	Loading	12.5	0.0021	0.0010	0.114975	0.05475	AP-42, Ch 11.19.2
5	05-RBF-001	Belt Conveyor	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
5	05-BEL-001	Bucket Elevator	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
5	05-MFT-001	I. Feed Tank	Conveying	12.5	0.00294	0.0014	0.160965	0.07665	AP-42, Ch 11.19.2
Subtotal							0.59787	0.2847	
Methodology							Total Mills 1, 3 & 5	4.00113	1.9053

Emission Rate in tons/yr = (lbs/ton)(tons/hr) (8760 hr/yr) (ton/2000 lb)

Note: PM Emission Factor = 2.1 times the PM-10 Emission Factor as per note (c) in Table 11.19.2-2

The following calculations determine the amount of emissions created by truck loading and unloading of aggregate, based on 8760 hours of use and AP-42, Ch 13.2.4 (Fifth edition, 1/95).

PM	$E_f = k \cdot (0.0032)^2 \cdot (U/5)^{1.3} / (M/2)^{1.4}$				
	= 0.0023 lb/ton	X	45	tons/hr	= 0.105 lbs/hr PM
where k =	0.74	(particle size multiplier)			0.458 tons/yr PM
U =	10.4	mile/hr mean wind speed			
M =	4	% material moisture content			
PM-10	$E_f = k \cdot (0.0032)^2 \cdot (U/5)^{1.3} / (M/2)^{1.4}$				
	= 0.0011 lb/ton	X	45	tons/hr	= 0.049 lbs/hr PM-10
where k =	0.35	(particle size multiplier)			0.217 tons/yr PM-10
U =	10.4	mile/hr mean wind speed			
M =	4	% material moisture content			

**** storage ****

Storage emissions, which result from wind erosion, are determined by the following calculations:

$E_f = 1.7 \cdot (s/1.5) \cdot (365-p) / 235 \cdot (f/15)$	
= 1.85 lb/acre/day	
where s =	1.6 % silt content of material
p =	125 days of rain greater than or equal to 0.01 inches
f =	15 % of wind greater than or equal to 12 mph
	50 % control by moisture
$E_p (\text{storage}) = E_f \cdot sc \cdot (40 \text{ cuft/ton}) / (2000 \text{ lb/ton}) / (43560 \text{ sqft/acre}) / (25 \text{ ft}) \cdot (365 \text{ day/yr})$	
PM & PM-10 = 1.86 tons/yr	After Controls 0.931 tons/yr
where sc = 150	,000 tons storage capacity

**** unpaved roads ****

The following calculations determine the amount of emissions created by unpaved roads, based on 8760 hours of use and AP-42, Ch 13.2.2 (Supplement E, 9/98).

Two methods are provided for calculating emissions. The first does not consider natural mitigation due to precipitation.

2.5 trip/hr x	
0.15 mile/trip x	
2 (round trip) x	
8760 hr/yr =	6570 miles per year

Method 1:	$E_f = k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M/0.2)^c]$	
PM	= 9.81 lb/mile	
where k =	10 (particle size multiplier for PM)	(k=10 for PM-30 or TSP)
s =	4.8 mean % silt content of unpaved roads	
b =	0.5 Constant for PM (b = 0.4 for PM-10)	
c =	0.3 Constant for PM-10 (c = 0.4 for PM-30 or TSP)	
W =	12.5 tons average vehicle weight	
M =	0.2 surface material moisture content, % (default is 0.2 for dry conditions)	
9.81 lb/mi x	6570 mi/yr =	32.22 tons/yr
	2000 lb/ton	

This method has a lower quality rating than Method 1.

Method 2:	$E_f = \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(Mdry/0.2)^c]\} \cdot [(365-p)/365]$	
	= 6.45 lb/mile	
where k =	10 (particle size multiplier for PM)	
	(k=2.6 for PM-10)	
s =	4.8 mean % silt content of unpaved roads	
b =	0.5 Constant for PM (b = 0.4 for PM-10)	
c =	0.3 Constant for PM-10 (c = 0.4 for PM-30 or TSP)	
W =	12.5 tons average vehicle weight	
Mdry =	0.2 surface material moisture content, % (default is 0.2 for dry conditions)	
	number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)	
p = 125		
6.45 lb/mi x	6570 mi/yr =	21.18 tons/yr
	2000 lb/ton	

Method 1:
PM-10

$$E_f = k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(M/0.2)^c]$$

where k = 2.6 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)

s = 4.8 mean % silt content of unpaved roads

b = 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP)

c = 0.3 Constant for PM-10 (c = 0.4 for PM-30 or TSP)

W = 12.5 tons average vehicle weight

M = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

$$\frac{2.21 \text{ lb/mi} \times 6570 \text{ mi/yr}}{2000 \text{ lb/ton}} = 7.26 \text{ tons/yr}$$

	Before Controls tons/yr PM	After Controls tons/yr PM	Before Controls tons/yr PM-10	After Controls tons/yr PM-10	Control Efficiency	50%
Summary Unpaved Roads	21.18	10.59	4.78	2.39		

Insignificant Natural Gas Combustion

Dryers Mill 1, 2, and 3 = 5.0 mmBtu/hr each and Mill 5 = 10.0 mmBtu/hr

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

Actual emissions less than 0.5 TPY for all pollutants

25.0

219.0

Emission Factor in lb/MMCF	Pollutant					CO 84.0
	PM* 1.9	PM10* 7.6	SO2 0.6	NOx 100.0 **see below	VOC 5.5	
Potential Emission in tons/yr	0.208	0.832	0.066	10.950	0.602	9.198

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Method 2:

$$E_f = \{k \cdot [(s/12)^{0.8}] \cdot [(W/3)^b] / [(Mdry/0.2)^c] \cdot [(365-p)/365]$$

where k = 2.6 (particle size multiplier for PM-10) (k=10 for PM-30 or TSP)

s = 4.8 mean % silt content of unpaved roads

b = 0.4 Constant for PM-10 (b = 0.5 for PM-30 or TSP)

c = 0.3 Constant for PM-10 (c = 0.4 for PM-30 or TSP)

W = 12.5 tons average vehicle weight

Mdry = 0.2 surface material moisture content, % (default is 0.2 for dry conditions)

p = 125 number of days with at least 0.254mm of precipitation (See Figure 13.2.2-1)

$$\frac{1.45 \text{ lb/mi} \times 6570 \text{ mi/yr}}{2000 \text{ lb/ton}} = 4.78 \text{ tons/yr}$$

HAPs - Organics

Emission Factor in lb/MMcf	Benzene 2.1E-03	Dichlorobenzene 1.2E-03	Formaldehyde 7.5E-02	Hexane 1.8E+00	Toluene 3.4E-03
Potential Emission in tons/yr	2.300E-04	1.314E-04	8.213E-03	1.971E-01	3.723E-04

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.0E-04	Cadmium 1.1E-03	Chromium 1.4E-03	Manganese 3.8E-04	Nickel 2.1E-03
Potential Emission in tons/yr	5.475E-05	1.205E-04	1.533E-04	4.161E-05	2.300E-04

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Propylene Glycol for dust suppression and grinding enhancement in each mill

Mill	Potential Usage TPY	VOC Emission Factor	Potential VOC Emissions TPY
1	42	1%	0.420
2	44	1%	0.440
3	32	1%	0.320
5	56	1%	0.560
			1.740

Summary of Significant Emission Unit Potential to Emit Before and After Controls (tons per year)

	Before Controls	Before Controls	After Controls	After Controls
	PM	PM-10	PM	PM-10
Emission Units w/Baghouses	1919.94	1919.94	19.20	19.20
Non-Baghouse Units	4.00	1.91	4.00	1.91
Loading/Unloading	0.458	0.217	0.458	0.217
Storage	1.86	1.86	0.931	0.931
	1926.26	1923.93	24.59	22.25

